## COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

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<b>Investigation by the Department of Public</b>	)	
<b>Utilities on its own Motion into Rate Structures</b>	)	D.P.U. 07-50
that will Promote Efficient Deployment of	)	
<b>Demand Resources</b>	)	
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# INITIAL RESPONSES TO QUESTIONS AND GENERAL COMMENTS OF FITCHBURG GAS AND ELECTRIC LIGHT COMPANY d/b/a UNITIL

Fitchburg Gas and Electric Light Company d/b/a Unitil ("Unitil" or "Company") files these Initial Responses to Questions Presented and General Comments in response to the Order issued by the Department of Public Utilities ("Department") on June 22, 2007, opening an investigation of rate structures and revenue recovery mechanisms that may reduce disincentives to the efficient deployment of energy efficiency measures and demand resources in Massachusetts, Docket D.P.U. 07-50. In its Order, the Department offered a straw proposal to illustrate how a base revenue adjustment mechanism might work to render electric and gas distribution utility revenue levels immune to changes in volumetric sales between rate proceedings. The Department also set out a number of specific questions whereby it sought comments on which of the identified elements of the straw proposal are appropriate for inclusion in a base revenue adjustment mechanism and whether there are other elements that should be considered.

As directed, in the sections below Unitil provides an Executive Summary of its comments and responds to each question presented. In addition, the Company has worked in collaboration with other Massachusetts electric and gas utilities to sponsor the testimony of John J Reed, Chairman and Chief Executive Officer of Concentric Energy Advisors ("CEA"), James D. Simpson, Vice President of CEA, and Lawrence Kaufman, Ph.D., Partner, Pacific Economics Group in this proceeding that will inform and assist the Department on specific areas of revenue decoupling.

## I. Executive Summary

#### General Comments

Unitil supports the Department's efforts to promote end-use energy efficiency, demand side resources and distributed generation through the design of appropriate and effective rate structures and revenue recovery mechanisms. Electric and natural gas distribution utilities are uniquely positioned to develop and deliver programs that will expand the penetration of such measures and will result in greater reliability, economic, and environmental benefits to the Commonwealth. The local distribution utilities possess a unique understanding and operational knowledge of the local distribution grid, they have continual and close access to energy users, and they are trusted by their customers to provide accurate information regarding opportunities to use energy more efficiently.

Unitil embraces this vision of a future collaboration between distribution utilities and energy efficiency providers through a properly structured regulatory regime to achieve real and lasting gains in the energy commodity marketplace. Removal of the financial barriers to greater participation in energy efficiency programs and other demand resources by distribution utilities will increase the performance of such programs, and increase the benefits of energy efficiency and demand response to customers, the economy, and the environment.

At the outset of this inquiry, Unitil wishes to emphasize the following critical points:

A properly designed revenue decoupling mechanism can be an effective way to more
closely align the interests of the distribution utility with those of energy users.
Revenue decoupling removes one of a utility's primary financial disincentives
involving the promotion of energy efficiency programs. This disincentive exists

because successful energy efficiency programs reduce a distribution utility's revenue by more than the costs that are saved by reducing consumption. The removal of disincentives alone, however, may not be sufficient to engage the capital resources necessary to fully realize the potential of energy efficiency and demand response measures. By adopting a well designed revenue decoupling mechanism and incorporating long-term rate plans as well as performance-based incentives, including allowing distribution utilities the opportunity to rate base and earn a return on capital investments in demand resources, the Department would foster an effective means of engaging the utility's resources and market advantages for the benefit of customers and the region.

- 2. Revenue decoupling is a revenue recovery mechanism. It is not a substitute for appropriate rate designs and tariff structures. Rate designs that recover a distribution utility's fixed costs through fixed charges rather than through volumetric charges will send appropriate price signals to end-users, and will create a financial environment where distribution utilities can most fully participate in energy efficiency and demand response programs.
- 3. Revenue decoupling is not a cost recovery mechanism. It does not ensure that a distribution utility can recover its "prudently incurred, just and reasonable costs" over time. As such, it is not a substitute for any currently-approved ratemaking approaches (e.g., Performance Based Regulation ("PBR"), long-term rate plans, or cost trackers) that accommodate the periodic recovery of a distribution utilities' growth in capital investment and increases in operating costs. The traditional rate setting model currently followed in Massachusetts, which establishes rates based upon an historic test year, implicitly relies upon revenue growth from increased energy and demand usage to fund the ongoing expense growth and investment needs of the distribution utility, which can moderate the frequency of rate filings. Indeed, the implementation of PBR plans was, at least in part, an explicit recognition by this

Commission that the "ebb and flow" of utility revenues was insufficient to recover growth in expenses absent more frequent and costly rate cases. While decoupling may provide increased rate stability and revenue certainty, as contemplated by the Department's straw proposal, it appears to be focused on the recovery of a target level of revenue that only grows with increases in the number of customers. Unitil's experience, however, has been that growth in the number of customers is not highly correlated with increases in distribution costs and capital investments. If an allowance for recovery of inflation and investment growth is not provided for as part of a revenue decoupling mechanism, the result will likely lead to continuous revenue shortfalls and increasing risk, requiring more frequent base rate proceedings and increased costs to customers.

## Summary of Responses to Questions

The Department's straw proposal for a Base Rate Adjustment Mechanism ("BRAM") is, in general, a positive step toward removing some of the financial barriers to utility participation in promoting energy efficiency programs and other demand resources. Unitil has certain suggestions related to the specific structure and design of the straw proposal to ensure that it is consistent with, and supportive of, the existing utility ratemaking approaches approved by the Department. These suggestions, which are discussed in more detail in Unitil's responses to the specific questions raised by the Department, are summarized below:

• It is not necessary to delay the implementation of the BRAM proposal until each utility has had its overall revenue requirements and class allocations reviewed in a future general rate proceeding. The target revenues under the BRAM could be based on the utility's current revenue levels. Rate proceedings should only be required when evidence exists that the utility's current revenue levels are inadequate, or otherwise inappropriate. To the extent a utility's current rates were deemed reasonable and adequate based on its last rate case decision or approved PBR or long-

term rate plan, then a rate proceeding should not be required simply because of the existence of the BRAM. Since its last rate case for its gas division was completed in the recent past (D.T.E. 06-109, issued on January 26, 2007), Unitil believes the Department can utilize its current revenue level in the structuring of its gas division's BRAM. Unitil recently filed a petition for a rate increase for its electric division (DPU 07-71, filed on August 17, 2007) which, once investigated and ruled upon by the Department, can be used to establish the appropriate revenue target in the structuring of its BRAM for its electric division.

- The Department should not exclusively rely on revenue per customer as the only measure for adjusting the revenue requirement over time in the decoupled environment. The annual re-determination of the target revenue level should be based upon adjustments for inflation, capital investment and unpredictable and uncontrollable significant costs. Although it is widely recognized that the fixed costs that comprise a utility's distribution revenue requirement are not particularly sensitive to energy consumption, they are sensitive to inflation and capital investment costs. In an environment with annual rates of inflation of two to three percent, and growth in utility rate base of five to six percent, a utility such as Unitil would remain under intense pressure to increase rates to recover increases in fixed distribution costs due to inflation and growth in capital investment even with a revenue decoupling mechanism based on a revenue-per-customer measure. Therefore:
  - a. All currently approved PBR and cost recovery plans (e.g., pensions, bad debts, etc.) should be continued under the BRAM. Revenue decoupling does not take the place of these existing rate plans and cost trackers.
  - b. Furthermore, new multi-year rate plans should be considered for utilities like Unitil that do not have approved rate plans.
- Distribution utility pricing needs to be cost-based, with greater reliance on the more

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stable and appropriate types of charges that better reflect cost causality. Demand and fixed charges should be emphasized to recover a greater portion of the distribution utility's fixed costs.

- The BRAM will likely have a minimal and as yet unquantifiable impact on the
  utility's risk, and no adjustment to the utility's capital structure and Return on Equity
  ("ROE") should be imputed to the BRAM, particularly during its initial
  implementation.
- Performance-based shareholder incentives for promoting energy efficiency should
  continue to be incorporated as part of the overall regulatory framework. The creation
  of the BRAM removes one barrier to utility participation in energy efficiency, but the
  overall goal of expanding these efforts remains an important goal that deserves
  continued support and promotion by the Department.

## **II.** Responses to Questions

#### Topic A: Allowed Revenues per Customer

## Department Request:

- 1) The Department's proposal that a company's allowed revenues per customer be determined through a subsequent base rate proceeding is intended to ensure that the allowed revenue levels, which serve as the basis for the base revenue adjustment mechanism, are closely aligned with the company's costs. Under what, if any, circumstances should the Department permit a company's allowed revenues per customer to be determined through some manner other than a base rate proceeding?
- 2) The Department's proposal uses an approach in which a company's allowed revenues per customer for each rate class does not change between base rate proceedings. An alternate approach would be to adjust the allowed revenues per customer values periodically, based on changes in each rate class' average usage per customer. Please discuss the merits of each approach.

#### Unitil Response:

1) Unitil believes that the Department's base rate case setting process is generally an appropriate forum for setting the utility's initial allowed revenue target (although, as further discussed below, revenue per customer measures should not be used as the exclusive measure for adjusting the revenue target over time). However, to accelerate the benefits to customers that could be achieved through utility promotion of energy conservation, the BRAM could be initiated more expeditiously using the utility's currently approved rates and current revenue levels.

The Department should permit a utility's subsequent re-determined revenue target to be set without a full base rate case in subsequent years to reflect the operation of incentive based ratemaking plans and cost trackers. This would enable the utility's revenues to track the underlying revenue requirements under these plans as they are periodically adjusted for the effects of inflation, incremental capital investments, and

other cost drivers. Unitil is not currently operating under a PBR or other long-term rate plan and would need to develop an appropriate mechanism to re-determine the revenue target annually consistent with the factors in existing PBR and long-term rate plans for other utilities. The ability to adjust the utility's revenue targets by these factors is a necessary component of a BRAM and would preserve the benefits of less frequent rate cases and providing incentives to effectively manage costs.

Accordingly, Unitil recommends that the Department adopt a flexible approach when establishing the revenue targets and appropriate measures for adjusting the revenue target over time to reflect the specific circumstances of each utility.

- 2) The Department's decoupling approach should not exclusively rely on revenue per customer as the sole measure for re-determining the revenue target over time and should be expanded to include adjustments for other factors, including:
  - Increasing capital investments and rate base, particularly with regard to non-revenue producing electric reliability investments and infrastructure replacements and natural gas infrastructure improvements and replacements (e.g., cast iron mains replacement);
  - The effects of inflation on operating and maintenance costs; and
  - Uncontrollable and unpredictable expense levels, such as pensions, and bad debts.

The BRAM represents a revenue recovery mechanism enabling the utility to recover its approved revenue requirement. To the extent the utility's required revenue requirement changes over time for factors not correlated to the number of customers, the BRAM should include adjustments to the utility's revenue target to track such changes. If the BRAM fails to incorporate important factors that may change in subsequent years, then the BRAM will not be fair and equitable to all parties, would lead to more frequent rate cases and create a disincentive for the distribution utility to participate in, or embrace, a decoupling proposal.

To the extent that a revenue per customer adjustment is a component of the BRAM, the use of class-specific revenue per customer adjustments should not be applied uniformly to all customer classes. Some customer classes, particularly those that contain large customers, are not sufficiently homogeneous to be appropriate for redetermining the revenue target. On an exceptions basis, each distribution utility should be allowed to recommend those classes which are to be included in the revenue decoupling mechanism and which are to be excluded.

## Topic B: Annual Reconciliation Calculation

## Department Request:

- 3) The Department's proposal that a company's actual versus allowed revenues be reconciled annually is intended to balance three objectives: rate stability, rate continuity, and administrative efficiency. Do annual reconciliations strike an appropriate balance among these three objectives or would alternate reconciliation periods (e.g. quarterly or semi-annually) better do so?
- 4) The Department's proposal to determine a company's actual revenue based on billed revenues is consistent with the base rate treatment applied to distribution-related bad debt costs. An alternate approach would be to determine actual revenues based on payments received. Please discuss the merits of each approach.
- 5) The Department's proposal for determining billed revenues is based on actual consumption. An alternate approach would be to determine billed revenues based on consumption normalized for weather and/or other factors.
  - a. Please discuss the merits of determining billed revenues using actual versus weather-normalized consumption.
  - b. Should consumption be normalized for other factors (e.g. economic conditions)? If so, identify those factors and describe how the normalization for such factors could be done.

## <u>Unitil Response</u>:

- 3) More frequent rate adjustments under the BRAM would avoid the potential for larger than desirable revenue deferral balances. Unitil recommends that the Department consider a quarterly or semi-annual rate reconciliation instead of an annual reconciliation to best accommodate the Department's ratemaking considerations. The Department may also want to consider establishing a range by which more frequent adjustments outside the range would be allowed in order to better manage deferrals.
- 4) There may be a theoretical advantage to basing the utility's actual revenues on payments received. In theory, this would allow each rate class's bad debt experience to be tracked and recovered from the individual rate classes. In practice, however, payments present a number of difficulties that tend to make the process less desirable. It is difficult to reconcile payments to any particular quarterly or semi-annual billing cycle. Bills are issued on a fairly stable schedule, but payments are received less systematically. Establishing the payments cycle on the basis of a particular date, for example, may introduce apparent under-collections or over-collections that would be rolled into the rates for the following year, when in fact the anticipated payments are only delayed a few days. Then the utility is in the position of having collected the revenue twice, which will generate a downward adjustment in the next subsequent year. Rather than create these rippling effects, it seems more appropriate to use billed revenues for the BRAM, while recognizing that the bad debt experience for each rate class needs to be updated over time, either during the annual revenue target redetermination process or as part of subsequent base rate proceedings.

- 5) Unitil believes that the use of actual billed revenues rather than a calculated weather normalized revenue level is the most appropriate approach to consider. The effect of weather on the utility and its customers should be accommodated within the BRAM for the following reasons:
  - Weather can have a significant impact upon the financial condition of a gas utility.
  - Weather can have a significant impact upon the level of customers' bills.
  - Addressing both these considerations within the BRAM is a fair and balanced approach. The utility would be assured of fixed cost recovery and customers would pay an appropriate price for delivery service under both colder and warmer than normal weather conditions.
  - Using actual billed revenues would avoid added computational complexity in the BRAM.

## Topic C: Annual Base Rate Adjustment

## Department Request:

6) The Department's proposal to recover the difference between a company's target and projected revenues through adjustments to its base energy charges is intended to send appropriate price signals to consumers. An alternate approach would be to adjust both base energy and demand charges (where applicable) to recover this difference. Please discuss the merits of each approach.

#### Unitil Response:

6) The Department's proposal is administratively efficient and consistent with other rate reconciliation mechanisms and cost trackers, but may not be reflective of the true price signals associated with the BRAM. It is widely recognized that a distribution utility's revenue requirements vary only slightly with energy consumption. The continued use of energy charges to recover essentially fixed customer and capacity costs promulgates an environment where customers continue to receive inappropriate pricing signals and utilities continue to experience revenue and rate instability. The administrative ease of an energy-only adjustment would be more tolerable in the short

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term if it was accompanied by recognition of the need for more cost-based rate

designs in the longer term.

Concurrent with the development of a BRAM should be the development and

deployment of more cost-based pricing for the delivery service that reflects the cost-

causal factors that determine revenue requirements. Two key steps in this evolution

of pricing for delivery service are: (1) increased use of demand billing, with contract

or annual demand substituting for monthly billing demand; and (2) establishment of

fixed monthly charges that better reflect the level of service provided to individual

customers.

Distribution charges need to evolve to be more cost-reflective and more stable. Such

new pricing arrangements are more appropriate for meeting the Department's stated

principles to:

More closely aligning revenues with costs

Rate continuity, fairness and earnings stability

Be simple, easily understood and transparent.

It is also important to note at this point that such a pricing arrangement actually sends

better economic pricing signals to customers. The Department's pricing policy

should encourage commodity prices to reflect the benefits of energy efficiency, and

delivery prices to reflect the true costs of providing delivery service.

Topic D: Reconciliation Filings

Department Request:

7) The Department's proposal to require a company to submit quarterly filings identifying actual and allowed revenues is intended to ensure that changes in rates are

made in a predictable and gradual manner.

- a. Under what circumstances should the Department allow an adjustment in base charges during a reconciliation period?
- b. Under what circumstances should the Department initiate a review of a company's base revenue adjustment mechanism?
- 8) What standards should the Department use to measure the performance of a company's base revenue adjustment mechanism over time?

## Unitil Response:

- 7) Part a. Please see Unitil's response to Question 3, above. Unitil believes that use of a semi-annual or quarterly rate reconciliation process would eliminate this potential problem. If this approach is not desirable, Unitil suggests that a percentage range be established (for example, plus or minus five (5) percent) where an adjustment would be allowed by the Department if the resulting rate adjustment was outside of that range.
  - Part b. If the Department is concerned about the potential for unexpected outcomes under the BRAM, it should consider linking the BRAM to an earnings sharing mechanism. This approach would avoid the need for costly and frequent regulatory reviews.
- 8) The standards for measuring performance over time should be the same standards identified for the initial establishment of the BRAM, specifically subsections B (Objectives) and C (Principles) of Section III (Straw Proposal) of the Department's Order D.P.U. 07-50 opening this investigative proceeding.

## Topic E: Change in Risk

## Departments Request:

9) How will the implementation of a base revenue adjustment mechanism affect a company's risk and how should such considerations be reflected in a company's capital structure and ROE?

## Unitil Response:

9) The BRAM will likely have a minimal and as yet unquantifiable impact on the utility's risk, and no adjustment to the utility's capital structure and Return on Equity ("ROE") should be imputed to the BRAM, particularly during its initial implementation. The BRAM has two features that act independently and in opposite directions. The composite of the two creates a sufficient level of uncertainty to likely leave the utility's overall risk profile unchanged, as a practical matter.

The BRAM includes a revenue stabilization feature that eliminates the utility's upside potential on revenues and minimizes the downside potential on revenues. Since it does this in a deferred manner, revenue certainty is not guaranteed, but the risk is largely mitigated. Increased revenue certainty may have some small benefit to the utility's risk profile, but this benefit is offset because the upside potential is lost. Secondly, the BRAM is being offered within the context of increased promotion of demand-side resources by distribution utilities. Distribution utilities are uniquely situated to promote demand side resources that will have a beneficial impact on the environment and the economic conditions of the service territory. At the same time, distribution utilities would be knowingly and actively working to reduce their future growth potential, and sacrificing future revenues (and potential earnings). This is a risky business proposition.

The Department should leave the utility's capital structure and ROE unchanged for the present, and develop comparative capital structure and ROE values from the utility's peers in the future, as the evidence becomes available. Massachusetts is not the only jurisdiction that is evaluating revenue decoupling mechanisms for distribution utilities. There will be sufficient opportunity in the future to compare the performance and capital requirements of "comparable" distribution utilities that have various forms of revenue decoupling, and until those comparisons can be performed, the participating utilities should not be penalized financially.

## Topic F: Shared Earnings Provision

## **Department Request:**

10) The Department's proposal to include a shared earnings provision in the base revenue adjustment mechanism is intended to strike an appropriate balance between the risks borne by customers and shareholders associated with company earnings. Please comment on the merits of such a provision. Also, comment on the design of the proposed earnings sharing provision.

#### Unitil Response:

10) Shared earnings provisions are important on their own merits, but are not inextricably linked to the BRAM proposal. To the extent that shared earnings provisions are in place for the individual utilities as part of PBR or long-term rate plans, they should be extended to include the effects of the BRAM.

The Department should allow flexibility in the design of an earnings sharing mechanism in the development of future PBR or a long-term rate plan that reflects all of the risks and rewards that may occur under a particular plan. Once these risks and rewards have been fully defined and examined, an earnings sharing mechanism can be constructed which has appropriate characteristics in terms of the size of the deadband, the sharing percentages, and any asymmetrical characteristics that reflect the particular situation of the individual utility.

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## <u>Topic G: Performance Based Regulation</u>

#### Department Request:

11) Please comment on the merits of implementing a base rate adjustment mechanism with and without the individual elements of a PBR plan (e.g. fixed term, inflation, productivity, performance standards, exogenous factors).

## Unitil Response:

11) As noted above, it is entirely appropriate to introduce the BRAM into an existing PBR plan or long-term rate plan. A PBR plan working in conjunction with a BRAM establishes a path for future revenue targets, or, more correctly, a bandwidth around that path while providing incentives to the utility to manage costs and service quality. Each of these individual elements of the PBR plan is appropriate in the presence of a BRAM.

## Topic H: Implementation Schedule

#### Department Request:

12) Please comment on how the Department should schedule the implementation of a base revenue adjustment mechanism for each gas and electric company in light of the need to move expeditiously, the resources required to implement such changes, and the specific circumstances of each company. How should the Department determine the order of individual base rate proceedings?

## Unitil Response:

12) The first step would be for the Department to determine whether or not each utility's current revenue level is sufficient to use as the initial cast-off target revenue level in the implementation of the BRAM. Since most utilities are currently operating under existing rate plans, there may not be a need for the completion of multiple base rate cases before implementation of the BRAM. (Please see Unitil's Response to

Question 1.) For Unitil, since its last rate case in for its gas division in Massachusetts was completed in the recent past (D.T.E. 06-109, issued on January 26, 2007) it believes the Department can utilize its current revenue level in the structuring of its gas division's BRAM. Unitil recently filed a petition for a rate increase for its electric division (DPU 07-71, filed on August 17, 2007) which, once investigated and ruled upon by the Department, can be used to establish the appropriate revenue target in the structuring of its BRAM for its electric division.

## Topic I: Other Questions

## **Department Request:**

13) How should the implementation of a base revenue adjustment mechanism affect the performance-based shareholder incentives that gas and electric companies currently are eligible to receive for promoting energy efficiency?

#### Unitil Response:

13) Performance-based shareholder incentives for promoting energy efficiency should remain unchanged. The Department should also provide additional incentives for utility investment in demand resources by allowing utilities the opportunity to rate base and earn a return on capital investments in demand resources. The creation of the BRAM removes one barrier to utility participation in energy efficiency, but the overall goal of expanding these efforts remains an important goal that deserves continued support and promotion by the Department. While the BRAM removes a significant disincentive, specific incentives should still be offered to utilities that actively promote and achieve load reductions through energy efficiency. Distribution utilities are one of the best-positioned entities to effectively deliver energy efficiency services to customers, but will experience many negative business impacts from actively reducing the amount of product that they deliver to their customers. Given the magnitude of financial, economic, environmental and intangible benefits that accrue to customers and the Commonwealth from improved

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energy efficiency, continued incentives to distribution utilities (at current or even higher levels) are likely to remain cost-effective and practical for the foreseeable future, and consumers would be disadvantaged if the removal of these necessary incentives resulted in the reduction or elimination of utility participation in energy efficiency programs.